

## WHAT IS CLAIMED IS:

- 1                   1.       A patient healthcare management system having a capability  
2       to evaluate patient kidney function, the system configured to:  
3                   receive input defining a patient's medical record including the  
4       patient's demographic information, medical condition and diagnosis;  
5                   calculate the patient's estimated glomerular filtration rate based on  
6       the patient's medical record;  
7                   output at least one medical treatment recommendation wherein the  
8       recommendation is based on the patient's medical record and estimated glomerular  
9       filtration rate; and  
10                  calculate and output at least one treatment goal for the patient.
- 1                   2.       The system of claim 1 wherein the at least one treatment goal  
2       for the patient comprises at least one of:  
3                   a goal blood pressure, a goal lipid level, a goal cholesterol level and  
4       a goal hemoglobin A1C level.
- 1                   3.       The system of claim 1 additionally configured to receive input  
2       specifying a treatment for the patient.
- 1                   4.       The system of claim 1 additionally configured to output an  
2       indication as to whether, based on the patient's medical record, the at least one  
3       medical treatment goal has been met.
- 1                   5.       The system of claim 1 wherein a plurality of clinical treatment  
2       algorithms are applied to the patient's medical record to generate the at least one  
3       treatment recommendation and the at least one patient treatment goal.
- 1                   6.       The system of claim 1 additionally configured to:  
2       receive input specifying a patient's current medication(s);  
3       receive input specifying a new prescription for the patient; and

4 generate an alert if the prescribed medication may antagonize a  
5 medication the patient is currently taking.

1 7. The system of claim 1 further configured to:  
2 receive input defining a plurality of patient medical records  
3 comprising patient demographic information, medical condition, diagnosis and  
4 treatment;  
5 receive input defining at least one medical record parameter to extract  
6 from the plurality of medical records; and  
7 automatically generate a report containing an aggregate of the at least  
8 one medical record parameter extracted from the plurality of medical records.

1 8. The system of claim 7 further configured to receive input  
2 defining a subset of the plurality of patient medical records from which to extract  
3 the at least one medical record parameter.

1 9. The system of claim 1 additionally configured to receive  
2 input, for each patient encounter with his or her healthcare provider, defining the  
3 patient encounter wherein each defined patient encounter is appended to the patient's  
4 medical record.

1 10. A computer-implemented patient healthcare management  
2 method involving the evaluation of patient kidney function, the method comprising:  
3 defining a patient's medical record including the patient's  
4 demographic information, medical condition and diagnosis;  
5 calculating the patient's estimated glomerular filtration rate based on  
6 the patient's medical record;  
7 automatically generating at least one medical treatment  
8 recommendation based on the patient's medical record and estimated glomerular  
9 filtration rate; and  
10 calculating at least one treatment goal for the patient.

1                   11.     The method of claim 10 wherein the at least one treatment  
2     goal for the patient comprises at least one of a goal blood pressure level, a goal lipid  
3     level, a goal cholesterol level and a goal hemoglobin A1C level.

1                   12.     The method of claim 10 further comprising specifying a  
2     treatment for the patient.

1                   13.     The method of claim 10 further comprising indicating  
2     whether, based on the patient's medical record, the at least one patient treatment  
3     goal has been met.

1                   14.     The method of claim 10 wherein a plurality of clinical  
2     treatment algorithms are applied to the patient's medical record to generate the at  
3     least one treatment recommendation and the at least one patient treatment goal.

1                   15.     The method of claim 10 further comprising:  
2                   specifying the patient's current medications;  
3                   specifying a new prescription for the patient; and  
4                   generating an alert if the prescribed medication may antagonize a  
5     medication the patient is currently taking.

1                   16.     The method of claim 10 further comprising:  
2                   defining a plurality of patient medical records comprising patient  
3     demographic information, medical condition, diagnosis and treatment;  
4                   defining at least one medical record parameter to extract from the  
5     plurality of medical records; and  
6                   automatically generating a report containing an aggregate of the at  
7     least one medical record parameter extracted from the plurality of medical records.

1                   17.     The method of claim 16 further comprising defining a subset  
2     of the plurality of patient medical records from which to extract the at least one  
3     medical record parameter.

1                   18.     The method of claim 10 further comprising defining each  
2     patient encounter with his or her healthcare provider wherein the defined patient  
3     encounter is appended to the patient's medical record.

1                   19.     A computer-based system for interactively managing patient  
2     healthcare and evaluating patient kidney function, the system comprising:  
3                   a means for defining a patient's medical record;  
4                   a means for establishing the patient's estimated glomerular filtration  
5     rate based on the patient's medical record;  
6                   a means for generating at least one patient treatment recommendation  
7     based on the patient's medical record and estimated glomerular filtration rate; and  
8                   a means for calculating at least one treatment goal for the patient.